

REMARKS

In the Office Action mailed October 20, 2004, claims 1-43 were rejected under 35 U.S.C. 102(b or e respectively) as being anticipated by U.S. Patent No. 5,159,028 (hereinafter referred to as "Matzner et al.") or U.S. Patent No. 6,538,065 (hereinafter referred to as "Suriano et al."). Next, claims 1, 2-6, 7, 8, 9, 13, 16, 17, 18, 19, 20, 30, 33, 34, 35, 36, 37, 38, 39, 42, and 43 were rejected under the judicially created doctrine of double patenting over claims 1, 3, 4, 5, 6-9, 23, 25-31, and 55 of U.S. Patent No. 6,538,065 (hereinafter referred to as "Suriano et al."). Claims 1-43 remain active in the application. No new matter has been added.

First, claims 1-43 were rejected under 35 U.S.C. 102(b or e respectively) as being anticipated by Matzner et al. or Suriano et al. This rejection is respectfully traversed.

The present disclosure is concerned with the preparation of hydroxyl-terminated arylate oligomers. The hydroxyl-terminated arylate oligomer is prepared, in part, by combining at least one aromatic diol, at least one dicarboxylic acid, and at least one diaryl carbonate to provide a mixture; heating the mixture in the presence of a catalyst selected from the group consisting of metal alkoxides, metal oxides and metal carboxylates; and applying a vacuum to prepare a hydroxy-terminated arylate oligomer. See independent Claims 1, 25, and 32.

Matzner et al. generally discuss a novel process for the preparation of a block copolymer. The block copolymer is a polyaryl ether-co polyester or polycarbonate. See Claim 1.

Suriano et al. generally discuss the preparation of a block copolyestercarbonate. A hydroxyl-terminated polyester intermediate is prepared in a reaction mixture

comprising a 1,3-dihydroxybenzene moiety and an aromatic dicarboxylic acid diarylester.

The polyester intermediate is then reacted with a carbonate precursor. See Claim 1.

Neither Matzner et al. nor Suriano et al. teach, suggest, or disclose the recited invention as claimed in independent claims 1, 25, and 32. Specifically, Matzner et al. and Suriano et al. do not teach, suggest, or disclose a method combining at least one aromatic diol, at least one dicarboxylic acid, and at least one diaryl carbonate to provide a mixture; heating the mixture in the presence of a catalyst selected from the group consisting of metal alkoxides, metal oxides and metal carboxylates; and applying a vacuum to prepare a hydroxy-terminated arylate oligomer. Particularly, Matzner et al. discuss the preparation of a block copolymer of a polyaryl **ether** and polycarbonate and/or polyarylate. See the Abstract. Matzner et al. make no mention of preparing a hydroxy-terminated arylate oligomer without the polyaryl ether component. Indeed, the polyaryl ether component is an essential part of the invention of Matzner et al. Matzner et al. provide no guidance or motivation for one skilled in the art to make a hydroxyl-terminated arylate oligomer without a polyaryl ether component. "Anticipation requires the presence in a single prior art reference disclosure each and every element of the claimed invention, *arranged as in the claim.*" *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984) (emphasis added). "[T]he [Examiner] must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference." *Lindemann Maschinenfabrik GmbH*, 221 U.S.P.Q. at 485. Therefore, anticipation cannot be found in a situation where the claimed elements are arranged differently in the prior art. Furthermore, it is error to

“treat the claims as a mere catalog of separate parts, in disregard of the part-to-part relationships set forth in the claims . . . that give the claims their meanings.” *Id.* at 486.

The present invention, as recited in independent claims 1, 25, and 32, thus is not anticipated by Matzner et al.

Although Suriano et al. discuss the preparation of a block copolyestercarbonate comprising alternate polycarbonate and polyester blocks, Suriano et al. fails to discuss the direct reaction of at least one aromatic diol, at least one dicarboxylic acid, and at least one diaryl carbonate to provide a mixture; heating the mixture in the presence of a catalyst selected from the group consisting of metal alkoxides, metal oxides and metal carboxylates; and applying a vacuum to prepare a hydroxy-terminated arylate oligomer. Suriano et al. prepares a hydroxy-terminated polyester intermediate. See Claim 1. Suriano et al make no mention of preparing the block copolyestercarbonate without the use of a hydroxy-terminated polyester intermediate. Indeed, the preparation of the hydroxyl-terminated polyester intermediate is an essential part of the invention of Suriano et al. Suriano et al. provide no guidance or motivation for one skilled in the art to make a block copolyestercarbonate without preparing the hydroxy-terminated polyester intermediate. As stated earlier, anticipation cannot be found in a situation where the claimed elements are arranged differently in the prior art. The present invention, as recited in independent claims 1, 25, and 32, thus is not anticipated by Suriano et al.

Claims 2-24, 26-31, and 33-43 depend either directly or indirectly from independent claims 1, 25, and 32 and are therefore believed to also be allowable for the reasons set forth above. In addition, the dependent claims set forth further limitations

which patentably distinguish the invention over all the prior art of record. Accordingly, it is respectfully requested that the rejection of claims 1-43 should now be withdrawn.

Next, claims 1, 2-6, 7, 8, 9, 13, 16, 17, 18, 19, 20, 30, 33, 34, 35, 36, 37, 38, 39, 42, and 43 were rejected under the judicially created doctrine of double patenting over claims 1, 3, 4, 5, 6-9, 23, 25-31, and 55 of U.S. Patent No. 6,538,065 (hereinafter referred to as "Suriano et al."). This rejection is respectfully traversed.

As stated earlier, Suriano et al. does not teach, suggest or disclose the recited invention as claimed in independent claims 1, 25, and 32. Specifically, there is no teaching or suggestion of combining at least one aromatic diol, at least one dicarboxylic acid, and at least one diaryl carbonate to provide a mixture; heating the mixture in the presence of a catalyst selected from the group consisting of metal alkoxides, metal oxides and metal carboxylates; and applying a vacuum to prepare a hydroxy-terminated arylate oligomer. As stated earlier, Suriano et al. discusses preparing a block copolyestercarbonate through the use of a hydroxy-terminated polyester intermediate. *In re Wright* states that "it is the invention as a whole that must be considered in obviousness determinations. The invention as a whole embraces the structure, its properties, and the problem it solves, [viewed in light of the teachings of the prior art]." 6 U.S.P.Q.2d 1959, 1961 (Fed. Cir. 1988). "Factors including unexpected results, new features, solution of a different problem, novel properties, are all considerations in the determination of obviousness in terms of 35 U.S.C. § 103." *Id.* at 1962. The present disclosure solves the problem of providing a hydroxy-terminated arylate oligomer without the need for preparing a hydroxy-terminated polyester intermediate. The present disclosure is a direct reaction of at least one aromatic diol, at least one dicarboxylic acid,

Appln. No. 10/676,199
Amd. dated January 20, 2005
Reply to Office Action of October 20, 2004

and at least one diaryl carbonate to prepare a hydroxyl-terminated arylate oligomer without the need for isolation or purification of any intermediate hydroxy-terminated.

Hence, the present disclosure is not obvious in view of Suriano et al. and it is respectfully requested that the judicially created obviousness-type double patenting rejection of claims 1, 2-6, 7, 8, 9, 13, 16, 17, 18, 19, 20, 30, 33, 34, 35, 36, 37, 38, 39, 42, and 43 should now be withdrawn.

In view of the foregoing amendment and for the reasons set out above, it is respectfully submitted that claims 1-43 which stand rejected in this application, are patentably distinct from the art cited in the Office Action and are now in condition for allowance. Favorable action on these claims is requested.

Respectfully submitted,



Bernadette M. Bennett
Reg. No. 44,532
Attorney for Applicant

CARTER, DELUCA, FARRELL & SCHMIDT, LLP
445 Broad Hollow Road, Suite 225
Melville, New York 11747
Tel (631) 501-5700
Fax (631) 501-3526